

**Exercise 1** Consider the functions  $f$  and  $g$  defined by the table of values below.

$x$	$f(x)$
-3	2
-2	4
-1	0
0	2
1	2
2	3
3	-2

$x$	$g(x)$
-3	-3
-2	-1
-1	-3
0	0
1	3
2	1
3	2

Use the pair of functions  $f$  and  $g$  to find the following values, if they exist. If the value does not exist, enter DNE.

(a)  $(f + g)(-3) = \boxed{-1}$

(b)  $(f - g)(2) = \boxed{2}$

(c)  $(f \cdot g)(-1) = \boxed{0}$

(d)  $(g - f)(1) = \boxed{1}$

(e)  $\left(\frac{f}{g}\right)(0) = \boxed{DNE}$

(f)  $\left(\frac{f}{g}\right)(3) = \boxed{-1}$

(g)  $\left(\frac{g}{f}\right)(-1) = \boxed{DNE}$

(h)  $(g \cdot f)(-2) = \boxed{-4}$